CLAIMS:

1. A microcircuit comprising:

a substrate having a first side and a second side;

one or more active components secured to the first side of the substrate;

a cover positioned over and substantially sealing the one or more active components; and

one or more passive components secured to the second side of the substrate in such a manner so as to be removable and replaceable.

2. The microcircuit as set forth in claim 1, wherein the microcircuit is a multi-chip module.

3. The microcircuit as set forth in claim 1, wherein the substrate is a low-temperature co-fired ceramic.

4. The microcircuit as set forth in claim 1, wherein the one or more active components are selected from the group consisting of: integrated circuits, transistors, and diodes.

5. The microcircuit as set forth in claim 1, wherein the one or more passive components include one or more passive surface mount components.

6. The microcircuit as set forth in claim 5, wherein the one or more passive surface mount components are selected from the group consisting of: capacitors, resistors, inductors, and memory modules.

7. A microcircuit comprising:

a substrate of low-temperature co-fired ceramic material having a first side and a second side;

one or more active components wire-bonded to the first side of the substrate; and

one or more passive components secured to the second side of the substrate in such a manner so as to be removable and replaceable.

8. The microcircuit as set forth in claim 7, wherein the microcircuit is a multi-chip module.

9. The microcircuit as set forth in claim 7, wherein the one or more active components are selected from the group consisting of: integrated circuits, transistors, and diodes.

10. The microcircuit as set forth in claim 7, wherein the one or more passive components are selected from the group consisting of: capacitors, resistors, inductors, and memory modules.

11. The microcircuit as set forth in claim 7, further including a cover positioned over and substantially sealing the one or more active components.

12. A microcircuit comprising:

a substrate of low-temperature co-fired ceramic material having a first side and a second side;

one or more active components secured to the first side of the substrate; and

one or more passive components secured by reflow-soldering to the second side of the substrate so as to be removable and replaceable.

13. The microcircuit as set forth in claim 12, wherein the microcircuit is a multi-chip module.

14. The microcircuit as set forth in claim 12, wherein the one or more active components are selected from the group consisting of: integrated circuits, transistors, and diodes.

15. The microcircuit as set forth in claim 12, wherein the one or more passive components are selected from the group consisting of: capacitors, resistors, inductors, and memory modules.

16. The microcircuit as set forth in claim 12, further including a cover positioned over and substantially sealing the one or more active components.

17. A microcircuit comprising:

a substrate of low-temperature co-fired ceramic material having a first side and a second side;

one or more active components wire-bonded to the first side of the substrate;

one or more passive components secured to the second side of the substrate in such a manner so as to be removable and replaceable; and

one or more edge connectors electrically connecting the active components to the passive components.

18. The microcircuit as set forth in claim 17, wherein the microcircuit is a multi-chip module.

19. The microcircuit as set forth in claim 17, wherein the one or more active components are selected from the group consisting of: integrated circuits, transistors, and diodes.

20. The microcircuit as set forth in claim 17, wherein the one or more passive components are selected from the group consisting of: capacitors, resistors, inductors, and memory modules.

21. The microcircuit as set forth in claim 17, further including a cover positioned over and substantially sealing the one or more active components.

22. A microcircuit comprising:

a substrate of low-temperature co-fired ceramic material having a first side and a second side;

one or more active components wire-bonded to the first side of the substrate;

one or more passive components secured to the second side of the substrate in such a manner so as to be removable and replaceable; and

one or more vias electrically connecting the active components to the passive components through the substrate.

23. The microcircuit as set forth in claim 22, wherein the microcircuit is a multi-chip module.

24. The microcircuit as set forth in claim 22, wherein the one or more active components are selected from the group consisting of: integrated circuits, transistors, and diodes.

25. The microcircuit as set forth in claim 22, wherein the one or more passive components are selected from the group consisting of: capacitors, resistors, inductors, and memory modules.

26. The microcircuit as set forth in claim 22, further including a cover positioned over and substantially sealing the one or more active components.